

**SYSTEM, METHOD AND SOFTWARE FOR STATIC  
AND DYNAMIC PROGRAMMING AND CONFIGURATION  
OF AN ADAPTIVE COMPUTING ARCHITECTURE**

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**Abstract of the Disclosure**

The present invention provides a system, method and software for programming and configuring an adaptive computing architecture or device. The invention utilizes program constructs which correspond to and map directly to the adaptive hardware having a plurality of reconfigurable nodes coupled through a reconfigurable matrix interconnection network. A first program construct corresponds to a selected node. A second program construct corresponds to an executable task of the selected node and includes one or more firing conditions capable of determining the commencement of the executable task of the selected node. A third program construct corresponds to at least one input port coupling the selected node to the matrix interconnect network for input data to be consumed by the executable task. A fourth program construct corresponds to at least one output port coupling the selected node to the matrix interconnect network for output data to be produced by the executable task;

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